

Technical details

Operating pressure	1 ... 10 bar
Temperature range	-10°C ... +80°C
Medium	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Differing the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
Materials	Cylinder tube: Al (anodized) End caps: Al (anodized) Piston rod: stainless steel Seals: PU, NBR (optional FKM)

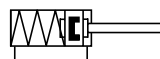


Single acting pneumatic cylinder with magnetic piston for proximity sensors and built-in cushioning rings. Standard stroke lengths in table below, additional lengths on request.

Versions



000, 010
single acting, built-in cushioning rings,
with magnetic piston,
normally retracted



200, 210
single acting, built-in cushioning rings,
with magnetic piston,
normally extended

Order code

Series		NXE-***-***-***		Versions	
NXE	standard			000	standard version, male thread, normally retracted
				010	standard version, female thread, normally retracted
				200	standard version, male thread, normally extended
				210	standard version, female thread, normally extended
Piston Ø				Stroke (mm)	
012	12 mm			XXX	max. 60 mm
016	16 mm			Standard	5, 10, 15, 20, 25
020	20 mm				
025	25 mm				
032	32 mm				
040	40 mm				
050	50 mm				
063	63 mm				
080	80 mm				
100	100 mm				

Model-no.:	NXE-012-...	NXE-016-...	NXE-020-...	NXE-025-...	NXE-032-...
Piston Ø (mm)	12	16	20	25	32
Connection	M5	M5	M5	M5	G1/8
Piston rod thread	M6	M8	M10 x 1.25	M10 x 1.25	M10 x 1.25
male					
female	M3	M4	M5	M5	M6

Model-no.:	NXE-040-...	NXE-050-...	NXE-063-...	NXE-080-...	NXE-100-...
Piston Ø (mm)	40	50	63	80	100
Connection	G1/8	G1/8	G1/8	G1/8	G1/4
Piston rod thread	M10 x 1.25	M12 x 1.25	M12 x 1.25	M16 x 1.5	M20 x 1.5
male					
female	M6	M8	M8	M10	M12

Series NXE

single acting

Technical data

Model-no.:	NXE-	012-...	016-...	020-...	025-...	032-...	040-...	050-...	063-...	080-...	100-...
	0 mm stroke (-x00)*	0.078	0.082	0.135	0.153	0.275	0.376	0.502	0.776	1.453	2.659
	0 mm stroke (-x10)*	0.074	0.074	0.121	0.139	0.261	0.362	0.481	0.755	1.402	2.560
Weight (kg)	0 mm stroke (-x00)**	0.095	0.099	0.162	0.215	0.357	0.476	0.628	0.932	1.807	3.139
	0 mm stroke (-x10)**	0.091	0.091	0.148	0.201	0.343	0.462	0.607	0.911	1.756	3.040
	each 100 mm stroke	0.170	0.170	0.270	0.310	0.410	0.500	0.630	0.780	1.180	1.600

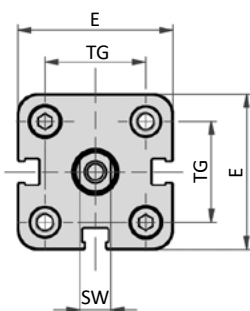
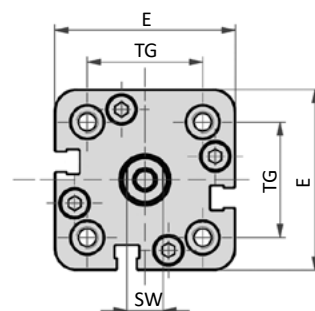
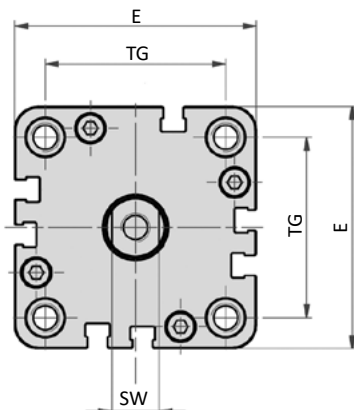
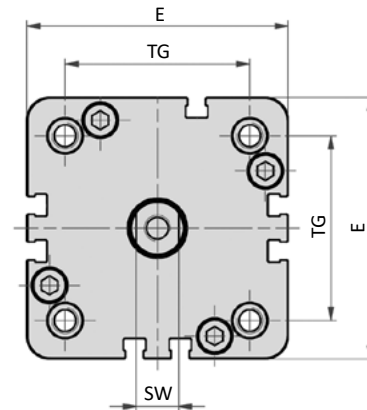
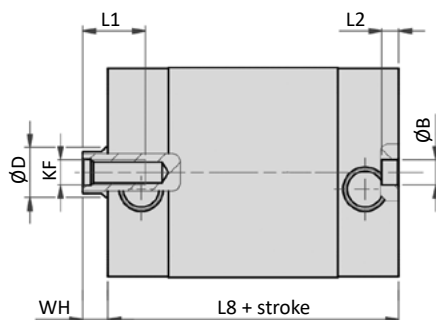
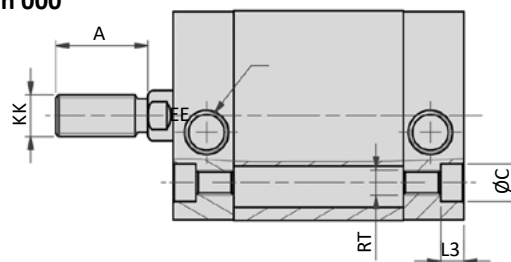
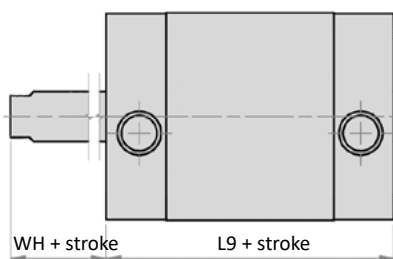
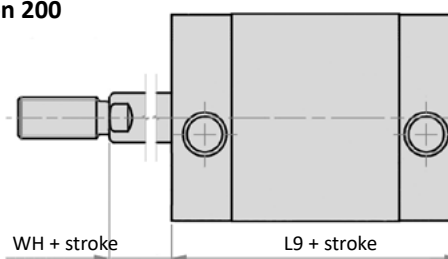
* up to 30 mm stroke, ** from 35 mm stroke

Model-no.:		NXE-012-xxx-0x0	NXE-016-xxx-0x0	NXE-020-xxx-0x0	NXE-025-xxx-0x0	NXE-032-xxx-0x0
Force at 6 bar and 5 mm stroke (N)	Extension	81 ... 83	81 ... 83	133 ... 136	224 ... 227	382 ... 386
	Retraction	26 ... 28	26 ... 28	34 ... 37	38 ... 41	48 ... 52
Force at 6 bar and 10 mm stroke (N)	Extension	81 ... 86	81 ... 86	133 ... 139	224 ... 230	382 ... 389
	Retraction	23 ... 28	23 ... 28	31 ... 37	35 ... 41	45 ... 52
Force at 6 bar and 15 mm stroke (N)	Extension	81 ... 88	81 ... 88	133 ... 142	224 ... 233	382 ... 393
	Retraction	21 ... 28	21 ... 28	28 ... 37	32 ... 41	41 ... 52
Force at 6 bar and 20 mm stroke (N)	Extension	81 ... 90	81 ... 90	133 ... 145	224 ... 236	382 ... 397
	Retraction	19 ... 28	19 ... 28	25 ... 37	29 ... 41	38 ... 52
Force at 6 bar and 25 mm stroke (N)	Extension	81 ... 92	81 ... 92	133 ... 148	224 ... 239	382 ... 400
	Retraction	17 ... 28	17 ... 28	22 ... 37	26 ... 41	34 ... 52

Model-no.:		NXE-040-xxx-0x0	NXE-050-xxx-0x0	NXE-063-xxx-0x0	NXE-080-xxx-0x0	NXE-100-xxx-0x0
Force at 6 bar and 5 mm stroke (N)	Extension	611 ... 616	992 ... 997	1588 ... 1594	2568 ... 2574	4031 ... 4041
	Retraction	63 ... 68	67 ... 75	89 ... 95	140 ... 147	200 ... 210
Force at 6 bar and 10 mm stroke (N)	Extension	611 ... 621	992 ... 1003	1588 ... 1600	2568 ... 2580	4031 ... 4051
	Retraction	58 ... 68	61 ... 75	83 ... 95	134 ... 147	190 ... 210
Force at 6 bar and 15 mm stroke (N)	Extension	611 ... 626	992 ... 1008	1588 ... 1606	2568 ... 2586	4031 ... 4061
	Retraction	53 ... 68	56 ... 75	77 ... 95	128 ... 147	180 ... 210
Force at 6 bar and 20 mm stroke (N)	Extension	611 ... 631	992 ... 1013	1588 ... 1612	2568 ... 2593	4031 ... 4071
	Retraction	48 ... 68	51 ... 75	71 ... 95	121 ... 147	170 ... 210
Force at 6 bar and 25 mm stroke (N)	Extension	611 ... 636	992 ... 1018	1588 ... 1618	2568 ... 2599	4031 ... 4081
	Retraction	43 ... 68	45 ... 75	65 ... 95	115 ... 147	160 ... 210

Model-no.:		NXE-012-xxx-2x0	NXE-016-xxx-2x0	NXE-020-xxx-2x0	NXE-025-xxx-2x0	NXE-032-xxx-2x0
Force at 6 bar and 5 mm stroke (N)	Extension	26 ... 28	26 ... 28	34 ... 37	38 ... 41	48 ... 52
	Retraction	53 ... 55	53 ... 55	133 ... 136	224 ... 227	382 ... 386
Force at 6 bar and 10 mm stroke (N)	Extension	23 ... 28	23 ... 28	31 ... 37	35 ... 41	45 ... 52
	Retraction	53 ... 58	53 ... 58	133 ... 139	224 ... 230	382 ... 389
Force at 6 bar and 15 mm stroke (N)	Extension	21 ... 28	21 ... 28	28 ... 37	32 ... 41	41 ... 52
	Retraction	53 ... 60	53 ... 60	133 ... 142	224 ... 233	382 ... 393
Force at 6 bar and 20 mm stroke (N)	Extension	19 ... 28	19 ... 28	25 ... 37	29 ... 41	38 ... 52
	Retraction	53 ... 62	53 ... 62	133 ... 145	224 ... 236	382 ... 397
Force at 6 bar and 25 mm stroke (N)	Extension	17 ... 28	17 ... 28	22 ... 37	26 ... 41	34 ... 52
	Retraction	53 ... 64	53 ... 64	133 ... 148	224 ... 239	382 ... 400

Model-no.:		NXE-040-xxx-2x0	NXE-050-xxx-2x0	NXE-063-xxx-2x0	NXE-080-xxx-2x0	NXE-100-xxx-2x0
Force at 6 bar and 5 mm stroke (N)	Extension	63 ... 68	67 ... 75	89 ... 95	140 ... 147	200 ... 210
	Retraction	611 ... 616	992 ... 997	1588 ... 1594	2568 ... 2574	4031 ... 4041
Force at 6 bar and 10 mm stroke (N)	Extension	58 ... 68	61 ... 75	83 ... 95	134 ... 147	190 ... 210
	Retraction	611 ... 621	992 ... 1003	1588 ... 1600	2568 ... 2580	4031 ... 4051
Force at 6 bar and 15 mm stroke (N)	Extension	53 ... 68	56 ... 75	77 ... 95	128 ... 147	180 ... 210
	Retraction	611 ... 626	992 ... 1008	1588 ... 1606	2568 ... 2586	4031 ... 4061
Force at 6 bar and 20 mm stroke (N)	Extension	48 ... 68	51 ... 75	71 ... 95	121 ... 147	170 ... 210
	Retraction	611 ... 631	992 ... 1013	1588 ... 1612	2568 ... 2593	4031 ... 4071
Force at 6 bar and 25 mm stroke (N)	Extension	43 ... 68	45 ... 75	65 ... 95	115 ... 147	160 ... 210
	Retraction	611 ... 636	992 ... 1018	1588 ... 1618	2568 ... 2599	4031 ... 4081

Dimensions series NXE
Ø 12 - 25

Ø 32-40

Ø 50

Ø 63 - 100

Version 010

Version 000

Version 210

Version 200


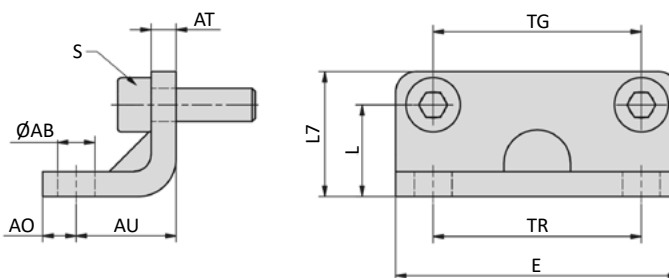
Piston Ø	A	Ø B	Ø C	Ø D	E	EE	KF	KK	L1	L2	L3	L8*	L8**	L9*	L9**	RT	SW	TG	WH
12	16	6	6	8	29	M5	M3	M6	6	4	3.5	38	48	38	48	M4	5	18	4.5
16	20	6	6	8	29	M5	M4	M8	8	4	3.5	38	48	38	48	M4	6	18	4.5
20	22	6	7.5	10	36	M5	M5	M10 x 1.25	10	4	4.5	38	48	38	48	M5	8	22	4.5
25	22	6	7.5	10	40	M5	M5	M10 x 1.25	10	4	4.5	39.5	59.5	39.5	49.5	M5	8	26	5.5
32	22	6	9	12	50	G1/8	M6	M10 x 1.25	12	4	5.5	44.5	64.5	44.5	54.5	M6	10	32	6
40	22	6	9	12	58	G1/8	M6	M10 x 1.25	12	4	5.5	45.5	65.5	45.5	55.5	M6	10	42	6.5
50	24	6	10.5	16	67	G1/8	M8	M12 x 1.25	12	4	6.5	45.5	65.5	45.5	55.5	M8	13	50	7.5
63	24	8	13.5	16	80	G1/8	M8	M12 x 1.25	14	4	8.5	50	70	50	60	M10	13	62	7.5
80	32	8	13.5	20	100	G1/8	M10	M16 x 1.5	15	4	8.5	56	86	56	76	M10	17	82	8
100	40	8	13.5	25	124	G1/4	M12	M20 x 1.5	20	4	8.5	66.5	96.5	66.5	86.5	M10	22	103	10

* up to 30 mm stroke, ** up to 35 mm stroke

Series NXD

Mounting accessories

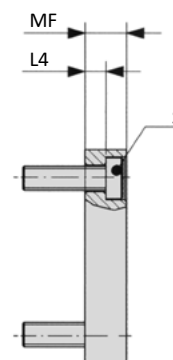
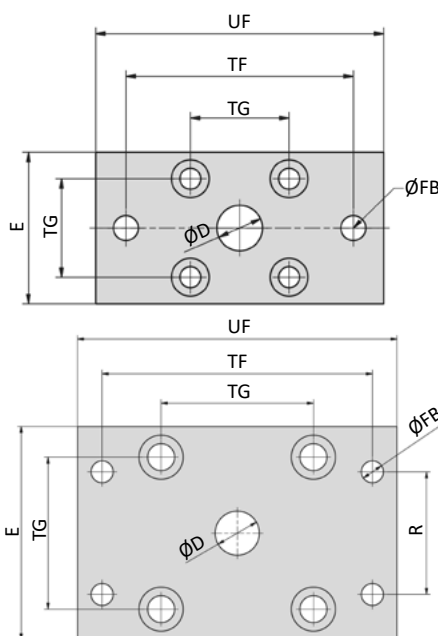
NXB-xxx-01 Foot mount



Model-no.:	Ø AB	AO	AU	AT	E	L	L7	S	TG	TR
NXB-032-01	6.6	8	18	5	50	16	24	M6 x 20	32	32
NXB-040-01	9	8	20	5	60	21.5	29.5	M6 x 20	42	42
NXB-050-01	9	8	24	6	68	22	30	M8 x 20	50	50
NXB-063-01	11	12	27	6	84	28.5	39	M8 x 20	62	62
NXB-080-01	11	12	30	8	102	24.5	36.5	M10 x 20	82	82
NXB-100-01	13.5	12	33	8	123	26.5	38.5	M10 x 20	103	103

Materials: steel, zinc plated; 2 x 2 screws in accordance with EN ISO 4762 are included..

NXB-xxx-02 Flange mount



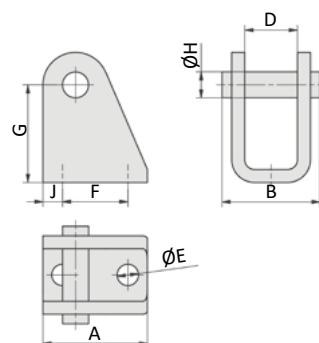
Model-no.:	Ø D	E	Ø FB	L4	MF	R	S	TF	TG	UF
NXB-016-02	10	29	5.5	4.6	10	-	M4 x 16	43	18	55
NXB-020-02	12	36	6.6	4.6	10	-	M5 x 20	55	22	70
NXB-025-02	12	40	6.6	4.6	10	-	M5 x 20	60	26	76
NXB-032-02	14	50	7	3.6	10	32	M6 x 20	65	32	80
NXB-040-02	14	60	9	3.6	10	36	M6 x 20	82	42	102
NXB-050-02	18	68	9	3.4	12	45	M8 x 25	90	50	110
NXB-063-02	18	87	9	4.4	15	50	M10 x 25	110	62	130
NXB-080-02	23	107	12	4.4	15	63	M10 x 25	135	82	160
NXB-100-02	28	128	14	4.4	15	75	M10 x 30	163	103	190

Materials: steel, zinc plated; 4 screws in accordance with DIN 7984 are included..

Series NXD

Mounting accessories

RC-xx Clevis mount



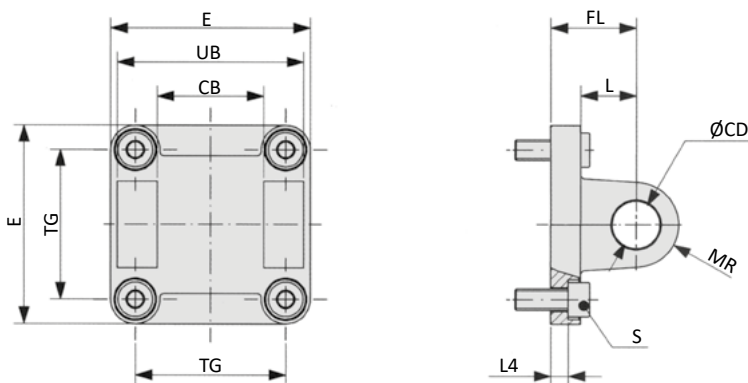
Model-no.:	Gegenlager zu:	A	B	D	Ø E	F	G	Ø H	J
RC-16	NXB-016-04	25	23	12.1	5.5	15	27	6	5
RC-30	NXB-020-04 NXB-025-04	32	30	16.1	6.6	20	30	8	6

steel, zinc plated, 2 snap rings are included..

NXB-xxx-03 Gabel



Inclusive clevis pin
order no.: **NXB-xxx-38**



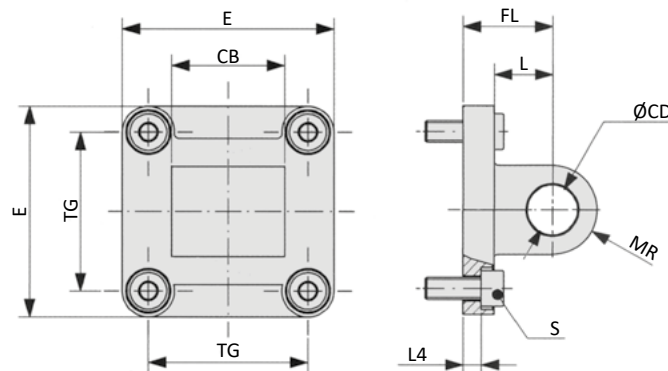
Model-no.:	CB	Ø CD	E	FL	L	L4	MR	S	TG	UB
NXB-032-03	26	10	48	22	13	5.5	10	M6 x 16	32	45
NXB-040-03	28	12	58	25	16	5.5	12.5	M6 x 16	42	52
NXB-050-03	32	12	66	27	16	6.5	12.5	M8 x 20	50	60
NXB-063-03	40	16	83	32	21	6.5	15	M10 x 25	62	70
NXB-080-03	50	16	102	36	23	10	15	M10 x 30	82	90
NXB-100-03	60	20	123	41	26	10	20	M10 x 30	103	110

Materials: Al, 4 screws in accordance with EN ISO 4762 are included..

Series NXD

Mounting accessories

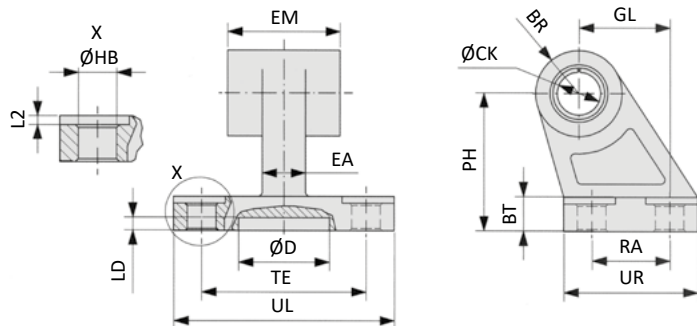
NXB-xxx-04 Swivel mount



Model-no.:	CB	Ø CD	E	FL	L	L4	MR	S	TG
NXB-016-04	12	6	27	16	10	2.6	6	M4 x 12	18
NXB-020-04	16	8	34	20	14	2.6	8	M5 x 16	22
NXB-025-04	16	8	38	20	14	2.6	8	M5 x 16	26

Materials: Al, 4 screws in accordance with EN ISO 4762 are included..

XLB-xxx-06 Swivel mount 90°



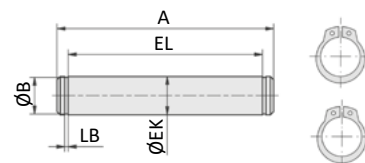
Model-no.:	BR	BT	ØCK	Ø D	EA	EM	GL	ØHB	L2	LD	PH	RA	TE	UL	UR
XLB-032-06	10	8	10	21	10	26	21	6.6	1.6	3	32	18	38	51	31
XLB-040-06	11	10	12	21	15	28	24	6.6	1.6	3	36	22	41	54	35
XLB-050-06	13	12	12	21	16	32	33	9	1.6	3	45	30	50	65	45
XLB-063-06	15	14	16	21	16	40	37	9	1.6	3	50	35	52	67	50
XLB-080-06	15	14	16	21	20	50	47	11	2.5	3	63	40	66	86	60
XLB-100-06	19	17	20	11	20	60	55	11	2.5	3	71	50	76	96	70

Materials: Al, bushing steel and PTFE

Series NXD

Mounting accessories

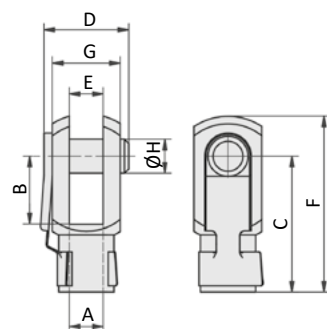
XLB-xxx-08 Clevis pin



Model-no.:	A	Ø B	Ø EK	EL	LB
XLB-032-08	53	9.6	10	46	1.1
XLB-040-08	60	11.5	12	53	1.1
XLB-050-08	68	11.5	12	61	1.1
XLB-063-08	78	15.2	16	71	1.1
XLB-080-08	98	15.2	16	91	1.1
XLB-100-08	118	19	20	111	1.3

Materials: steel, zinc plated; 2 snap rings are included..

RD-xx, FD-xx Rod clevis



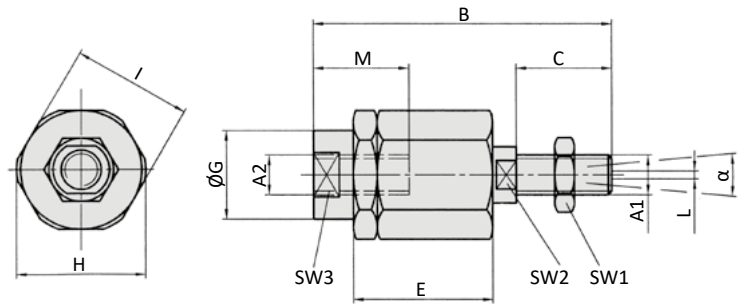
Model-no.:	for cylinder Ø	A	B	C	D	E	F	G	Ø H
RD-16	12	M6	12	24	16	6	31	12	6
RD-20	16	M8	16	32	22	8	42	16	8
RD-25	20 - 40	M10 x 1.25	20	40	26	10	52	20	10
FD-40	50, 63	M12 x 1.25	24	48	32	12	62	24	12
FD-63	80	M16 x 1.5	32	64	40	16	83	32	16
FD-80	100	M20 x 1.5	40	80	50	20	105	40	20

Materials: steel, zinc plated

Series NXD

Mounting accessories

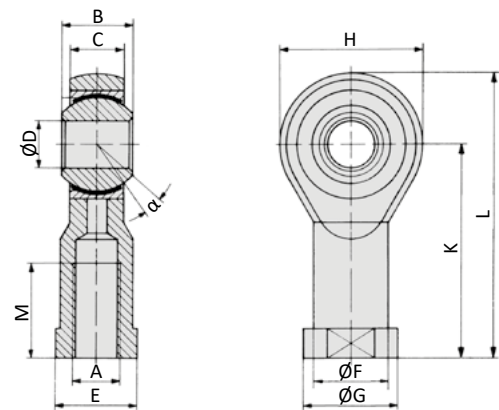
FK-xx Flexible coupling



Model-no.:	for cylinder	A1, A2	B	C	D	E	ØG	H	I	L	M	SW1	SW2	SW3	α
FK-16	12	M6	35	11	2.5	17.5	8.5	14.5	13	1	12.5	10	5	7	6°
FK-20	16	M8	57	21	5	26	12.5	19	17	2	16	13	7	11	8°
FK-32	20 - 40	M10 x 1.25	71.5	20	7.5	35	22	32	30	2	22	17	12	19	8°
FK-40	50, 63	M12 x 1.25	75	24	7.5	35	22	32	30	2	22	19	12	19	8°
FK-63	80	M16 x 1.5	104	32	10	53	32	45	41	2	30	24	20	27	6°
FK-80	100	M20 x 1.5	119	40	10	53	32	45	41	2	37	30	20	30	6°

Materials: steel, zinc plated

RO-xx, FO-xx Rod eye



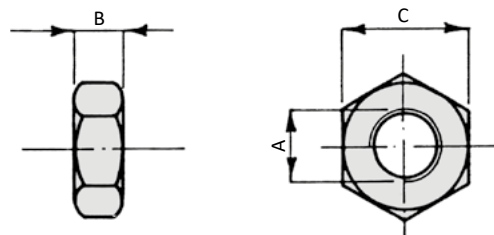
Model-no.:	for cylinder	A	B	C	ØD	E	ØF	ØG	H	K	L	M	α
RO-16	12	M6	9	6.75	6	11	10	13	20	30	40	12	13°
RO-20	16	M8	12	9	8	14	12.5	16	24	36	48	16	14°
RO-25	20 - 40	M10 x 1.25	14	10.5	10	17	15	19	28	43	57	20	13°
FO-40	50.63	M12 x 1.25	16	12	12	19	17.5	22	32	50	66	22	13°
FO-63	80	M16 x 1.5	21	15	16	22	22	27	42	64	85	28	15°
FO-80	100	M20 x 1.5	25	18	20	30	27.5	34	50	77	102	33	14°

Materials: steel, zinc plated, bearing steel, bronze bushing

Series NXD

Mounting accessories

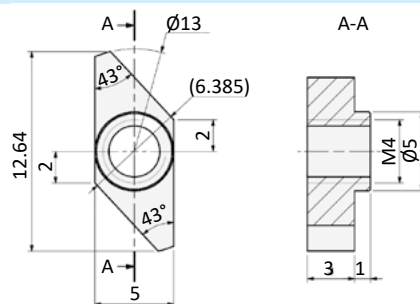
RL-xx, FE-xx Piston rod nut



Model-no.:	for cylinder	A	B	C
RL-16	12	M6	4	10
RL-20	16	M8	5	13
RL-25	20 - 40	M10 x 1.25	5	17
FE-40	50, 63	M12 x 1.25	8	19
FE-63	80	M16 x 1.5	8	24
FE-80	100	M20 x 1.5	10	30

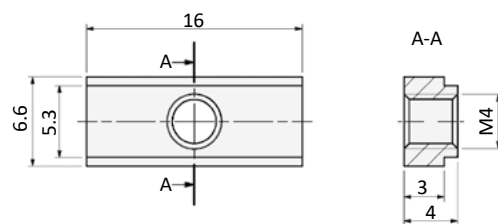
Material: steel, zinc plated

NST-T-4-U Slot nut



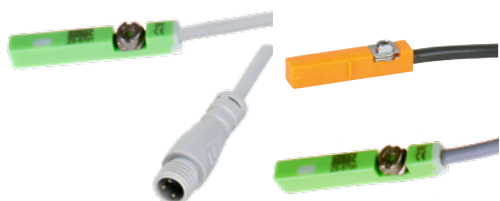
Materials: steel, zinc plated

NST-T-4-V Slot nut



Materials: steel, zinc plated

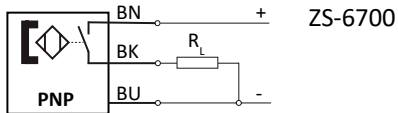
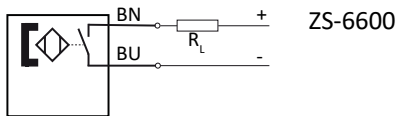
Proximity sensors



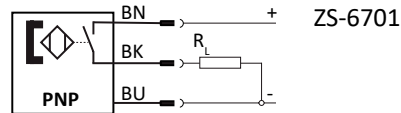
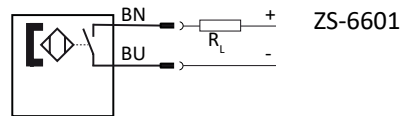
Series ZS

Proximity sensors

Proximity sensors with cable



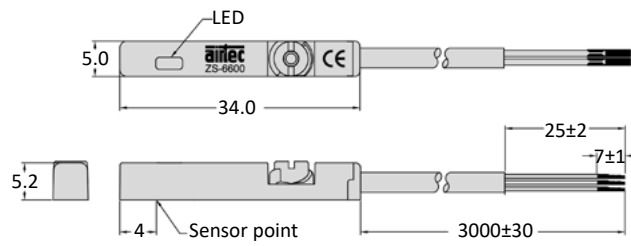
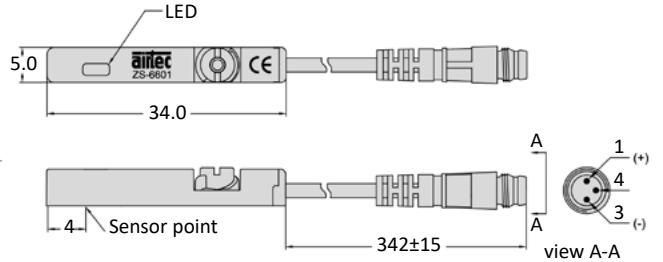
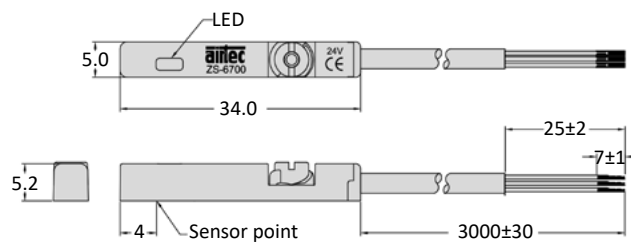
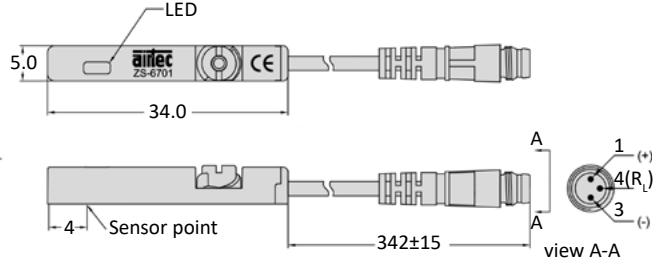
Proximity sensors with plug



Technical data

Model-no.:	ZS-6600	ZS-6601	ZS-6700	ZS-6701
				
Design	2-pole inductive	2-pole inductive	3-pole inductive	3-pole inductive
Contact function	NO	NO	NO	NO
Output	NO	NO	PNP	PNP
Rated operational voltage	10 ... 30 V DC	10 ... 30 V DC	5 ... 30 V DC	5 ... 30 V DC
Rated operational current I_E	≤ 50 mA	≤ 50 mA	≤ 100 mA	≤ 100 mA
Max. voltage drop at I_E	≤ 2.65	≤ 2.65	≤ 1.0	≤ 1.0
Breaking capacity	1,4 W	1,4 W	3 W	3 W
Sensitivity	40 ~ 800 Gauss	40 ~ 800 Gauss	40 ~ 800 Gauss	40 ~ 800 Gauss
Cable length	3 m	0.3 m with M8 connection	3 m	0.3 m with M8 connection
Reverse polarity protection	nein	nein	ja	ja
Temperature range	-10 ... +70°C	-10 ... +70°C	-10 ... +70°C	-10 ... +70°C
Protection	IP 67	IP 67	IP 67	IP 67
Switching status indication	LED red	LED red	LED red	LED red

Dimensions

ZS-6600

ZS-6601

ZS-6700

ZS-6701


Mounting

The sensors are mounted at the groove of the cylinder profile. It is fixed by turning the fixing screw at the sensor clockwise.

Series ZS

Proximity sensors



Connection cable M8

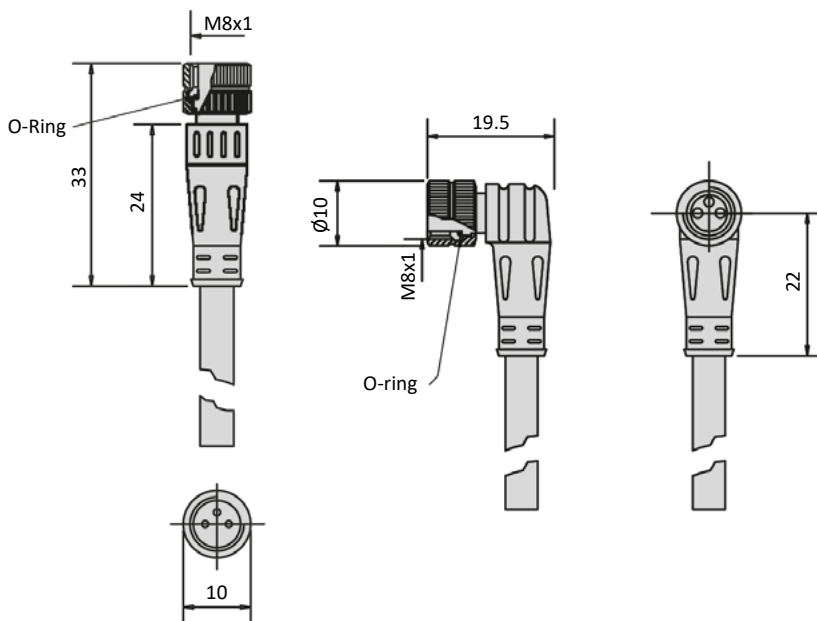
Contacts	M8 Plug socket
Protection	IP 67 according to EN 60529 in conjunction with suitable connection plug
Duty cycle	100 %
Temperature range*	-25°C...+90°C
max. voltage	60 V AC / DC
Use for	Solenoids with M8 plug, cylinder switch with M8 plug



Model-no.:	KA-10-01	KA-30-01	KA-50-01	KA-100-01
Contacts	M8 Socket, straight	M8 Socket, straight	M8 Socket, straight	M8 Socket, straight
Mounting	Coupling nut	Coupling nut	Coupling nut	Coupling nut
Cable	3-pin	3-pin	3-pin	3-pin
Length (L)	1 m	3 m	5 m	10 m

Model-no.:	KA-11-01	KA-31-01	KA-51-01	KA-101-01
Contacts	M8 Socket, elbow 90°	M8 Socket, elbow 90°	M8 Socket, elbow 90°	M8 Socket, elbow 90°
Mounting	Coupling nut	Coupling nut	Coupling nut	Coupling nut
Cable	3-pin	3-pin	3-pin	3-pin
Length (L)	1 m	3 m	5 m	10 m

Dimensions



Pin assignment



1 = brown
3 = blue
4 = black

Cylinder - * * * - xxxx		
Cylinder double acting	Piston rod versions	Seals, Air connection
0 piston rod on one side with magnetic piston adjustable cushioning	0 piston rod stainless steel male thread	0 standard seals (PUR, NBR) air connection G thread
1 piston rod on one side adjustable cushioning	1 piston rod stainless steel female thread	1 standard seals (PUR, NBR) air connection NPT thread
2 piston rod on one side with magnetic piston	2 piston rod stainless steel female thread with guide and non rotating	2 high temperature version (FKM) air connection G thread
3 piston rod on one side	3 piston rod stainless steel male thread non rotating	3 high temperature version (FKM) air connection NPT thread
4 double end piston rod with magnetic piston adjustable cushioning	4 piston rod stainless steel female thread non rotating	4 standard seals (NBR) piston rod seal FKM air connection G thread
5 double end piston rod adjustable cushioning	5 piston rod steel hard chrome plated male thread	5 standard seals (NBR) piston rod seal FKM air connection NPT thread
6 double end piston rod with magnetic piston	6 piston rod steel hard chrome plated female thread	
7 double end piston rod	7 Doppelkolbenstange	
8 double end piston rod through hollow with magnetic piston	8 piston rod stainless steel without thread	
	9 piston rod steel hard chrome plated female thread with guide and non rotating	
	Axxx piston rod stainless steel male thread lengthened by xxx mm [#]	
	Bxxx piston rod stainless steel female thread lengthened by xxx mm	
	Cxxx piston rod steel hard chrome plated male thread lengthened by xxx mm [#]	
	Dxxx piston rod steel hard chrome plated female thread lengthened by xxx mm [#]	
	Exxx piston rod stainless steel without thread lengthened by xxx mm [#]	
	Fxxx piston rod steel hard chrome plated without thread lengthened by xxx mm [#]	
	V piston rod stainless steel AISI 316 (1.4401) male thread	
	xxxx - Additions* ATEX EX X cylinders in accordance with 2014/34/EU (ATEX) E8 piston rod seal E8, two-part, with plastic scraper	
	* Use taking into account the maximum length of 20 characters for an article number	

Cylinder single acting
0 piston rod on one side with magnetic piston normally retracted
1 piston rod on one side normally retracted
2 piston rod on one side with magnetic piston normally extended
3 piston rod on one side normally extended
4 double end piston rod with magnetic piston
5 double end piston rod

Exceptions

Round cylinders are described by the designation of the series.
A design code is only used if there are deviations from the standard described.

If it is not possible to describe the version of the cylinder using the version code, a project number in the form Pxxxx should be used.

Not all options are suitable for all cylinder series